WHY DOES GOOD GOVERNANCE NEGATIVELY CORRELATE WITH ECONOMIC GROWTH? – A focus on the Pacific SIDS

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The presentation is organised in six sections.
1. Introduction
2. Brief literature review on matters relating to good governance and growth.
3. Political, economic and social governance and their relationship to GDP per capita
4. Political, economic and social governance and their relationship with economic growth
5. A deeper look at the governance/growth relationship
6. Implications for the Pacific SIDS.
1. Introduction
Objectives of the presentation

The presentation assesses the state of governance in the Pacific Small Island Developing States (P-SIDS) by comparing these states among themselves, with other SIDS, and with the rest of the world, utilising three indicators relating to political, economic and social governance. The three indicators used in this study are: 

(i) **Political governance**: using the Rule of Law indicator of the Worldwide Governance Indicators; 
(ii) **Economic governance**: using the Macroeconomic Stability sub-index of the Economic Resilience Index; and 
(iii) **Social governance**: using the non-income component of the Human Development Index.
Indicators used in the presentation

The titles of the second and third indices do not directly refer to governance, but they are strongly influenced by economic and social policy, which are themselves associated with economic and social governance.

It will be shown that the three governance indicators are positively correlated with GDP per capita but negatively correlated with GDP growth.

This presentation attempts to give an explanation for this.
2. The Pacific Small Island States - Background
The Pacific island states (P-SIDS)

The P-SIDS covered in this study are:
• Fiji
• Kiribati
• Micronesia
• Marshall Islands
• Samoa
• Solomon Islands
• Tonga
• Vanuatu

The World Bank classifies Fiji, Marshall Islands and Tonga upper-middle-income economies and the remaining five PSIDS as lower-middle-income economies.

Palau, Tuvalu, Cook Islands and Nauru are were left out of the index comparisons due to non-availability of data. Papua New Guinea was left out as in reality this country is not a small island state.

2. The Pacific SIDS: Background
Some P-SIDS are micro states

Population (thousands, 2014)

<table>
<thead>
<tr>
<th>Country</th>
<th>Population (thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fiji</td>
<td>881</td>
</tr>
<tr>
<td>Solomon Islands</td>
<td>562</td>
</tr>
<tr>
<td>Vanuatu</td>
<td>257</td>
</tr>
<tr>
<td>Samoa</td>
<td>190</td>
</tr>
<tr>
<td>Kiribati</td>
<td>109</td>
</tr>
<tr>
<td>Micronesia</td>
<td>104</td>
</tr>
<tr>
<td>Tonga</td>
<td>102</td>
</tr>
<tr>
<td>Marshall Islands</td>
<td>54</td>
</tr>
<tr>
<td>Palau</td>
<td>18</td>
</tr>
<tr>
<td>Tuvalu</td>
<td>11</td>
</tr>
</tbody>
</table>

2. The Pacific SIDS: Background
The Pacific SIDS: Background

GDP per capita (Average 2010-2014)

GDP per Capita in US$ and in PPP (Thousand)

Source: IMF (2014)
Debt Ratio (Average 2010-2014)

Government Debt as a ratio of GDP (%)

Source: IMF (2014)

2. The Pacific SIDS: Background
2. The Pacific SIDS: Background

Real GDP Growth Rate (% 2010-2014)

Source: IMF (2014)
Current account balance (2010-2014)

Source: IMF (2014)

2. The Pacific SIDS: Background
3. Brief Literature Review on Governance
The word Governance often refers to the administrative and decision-making processes relating to states, corporations, and other organisations, but in this study the term is used with reference to states, and is therefore associated with public administration (for the various definitions of governance see World Bank, 2002).

A definition of governance, in line with the approach taken in this paper, proposed by the Commission of the European Communities (2006), underlines the importance of defining governance in such a way as to take account of its political, economic and social dimensions.

3. Literature Review: (a) The Meaning of Governance
Kaufman et al. (2010) state that although the concept of governance is widely discussed among policymakers and scholars, there is as yet no strong consensus around a single definition of governance or institutional quality.

The authors state that in specific areas of governance such as the rule of law, there are extensive debates among scholars over “thin” versus “thick” definitions, where the former focus narrowly on whether existing rules and laws are enforced, while the latter assigns more importance to the justice of the content of the laws.

3. Literature Review: (a) The Meaning of Governance
Khan (2007) distinguished between **market-enhancing** versus **growth-enhancing** types of governance, associating market-enhancing governance with a liberal economic stance that facilitates the operation of the market mechanism and reduces transaction costs.

Khan linked the growth-enhancing form of governance with the leadership role government aimed at overcoming market failures, promoting investment, particularly in infrastructure, in resources use and in technological development.

Khan argued that these two forms of governance may not mutually exclusive.
In some strands of the literature, governance is closely associated with institutions, since these are essential for enforcing property rights and putting in place legal/administrative systems (Rodrik, 2008, Brown, 2010).

The basic argument in this context is that weak institutions may directly hamper effective economic, social and political management and, in addition, may inhibit economic growth due to various factors, including lack of investment attraction.
Governance and corruption

Corruption features prominently in many studies on Governance. Some studies indicate that corruption is extensive in developing countries (Svensson, 2005). Corruption may be beneficial to the persons who bribe and those bribed, but it creates various economic downsides, including additional costs to firms and negative effects on the provision of goods and services by the government (Olken & Pande, 2011).

Corruption also generates an atmosphere of uncertainty and dishonesty. Some studies (e.g., Huntington, 1968) suggest that corruption can be beneficial, when governments are autocratic and remain in power by hook or by crook. However, as Easterly (2006) argued, claims that...
The relationship between good governance indicators and GDP per capita of countries, is generally found to be positive with a high degree of correlation between the two variables, as confirmed in the present study. This relationship is also found in more rigorous and complicated studies on this issue, notably in Kaufman and Kraay (2002).

There is however some debate about the direction of causality. Kaufman and Kraay (2002) show that per capita income and the quality of governance are strongly positively correlated across countries. They find a strong positive causal effect running from better governance to higher per capita income, and a weak and even negative causal effect running in the opposite direction from per capita income to governance.
Many studies do not find positive correlation between governance and economic growth. It is often observed that the best politically governed countries (e.g. Western Europe) are growing at a much slower rate than the not-so-well governed countries of Asia and Africa.

Intuitively, one should think that economically backward countries can grow faster than advanced countries as the former countries can copy and adopt readily available technologies invented by countries that developed earlier. This catching-up technological laggards has been termed the “advantage of backwardness” by Gerschenkron (1952).
Growth and the Convergence Theory

Theoretically it can also be argued that economically backward countries can grow faster than economically advanced countries due to the fact that in the former countries capital may be associated with better returns than is the case with the latter countries.

According to the so-called Solow-Swan convergence theory, based on neo-classical predictions, poorer countries will eventually catch up with richer countries over time, mainly because poorer countries have a smaller capital stock, associated with a higher marginal productivity.
In spite of this, several publications associate good governance, and the necessary institutions for this, with growth. A substantial body of literature consider good governance as a precondition for growth (Kaufmann, 2005; Reynolds, 1983), and similarly with regard to governance institutions (Acemoglu et al., 2005; North; 1990; Aron, 2000; Commission on Growth and Development, 2008).

The direction of causation of economic growth and governance is also a matter of debate, with some authors arguing that growth comes first and governance and the accompanying institutions later (e.g. Durlauf et al., 2005; Glaeser et al., 2004).
The link between growth and governance has been questioned by Kurtz and Schrank (2007) who doubt whether such a connection exists and query whether the data used to measure governance as well as the methods used to estimate such a relationships are good enough.

Rodrik (2008) argues that there are many countries that are growing rapidly despite poor governance to render suspect any general claim to the contrary and governance is generally not a prerequisite for getting growth going. Rodrik also opines that as a rule, broad governance reform is neither necessary nor sufficient for growth, and therefore a broad governance agenda rarely deserves priority as part of a growth strategy, except in rare instances where “weak
Contradictory signals

The literature on the effect of good governance on economic growth therefore sends contradictory signals, with some authors, notably Kaufman and Kraay (2002) arguing strongly in favour the connection and others, such as Rodrik (2008) and Kurts and Schrank (2007) arguing that there is no evidence that such a connection exists.

Rodrik (2008) argues, there is no strong econometric evidence that relates standard governance criteria to growth.
4. The Three Governance Indicators and GDP Per Capita
Correlation of governance with GPD per capita

In this section, we shall examine the relationship between the three governance indicators and GDP per capita.

It will be shown that all three indicators are positively correlated with GDP per capita, indicating that there is a tendency for the most prosperous and economically advanced countries to have the highest level of good governance.

The governance scores of the P-SIDS will be compared: (a) between the P-SIDS themselves (n = 8); (b) with other SIDS (n = 28); and (c) with their income comparators (n = 183 countries).
Political governance and GDP per capita

Political governance is measured by the Rule of Law indicator of the Worldwide Governance Indicators (WGI). The WGI has six dimensions of governance, namely (1) voice and accountability (2) political stability and absence of violence (3) government effectiveness (4) regulatory quality (5) rule of law and (6) control of corruption. A detailed description of the methodology is given in Kaufmann et al. (2010).

This study utilises the 2013 version of the WGI (World Bank, 2014). The scores range from 2.5 (the best) to -2.5 (the worst).
The index that measures political governance is the Rule of Law indicator of the Worldwide Governance Indicators available at http://info.worldbank.org/governance/wgi/index.aspx#home.
It can be seen that the average political governance score of the P-SIDS is slightly lower than the average for all SIDS and higher than the average for the upper middle-income economies.
When all SIDS are considered individually, Samoa received the best political governance score among P-SIDS while Fiji and Solomon Islands received relatively low scores.

P-SIDS = Pacific small island states  
C-SIDS = Caribbean small island states;  
A-SIDS = Africa and Indian Ocean small island states.
Economic governance and GDP per capita

Economic governance is measured by the macroeconomic stability component of the Economic Resilience Index (STB), which was developed in Briguglio et al. (2009) and was recently updated in Briguglio (2014). This index contains three sub-indicators, namely (a) inflation (measured by the GDP deflator), (b) debt as a ratio of GDP and (c) current account imbalances as a ratio to GDP.

These indicators were chosen because they are considered to be policy induced and thus closely related to economic governance. A detailed description of the method used to construct the STB is given in Briguglio (2014). The data was sourced from the IMF World Economic Outlook database and the three sub-indices were rescaled Max-Min formula.
The index that measures economic governance is the Macroeconomic Stability Index, (STB) which is a component of the Economic Resilience Index. Source: Briguglio (2014)
P-SIDS economic governance compared

<table>
<thead>
<tr>
<th>Countries</th>
<th>EG Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average P-SIDS</td>
<td>0.582</td>
</tr>
<tr>
<td>Average C-SIDS</td>
<td>0.446</td>
</tr>
<tr>
<td>Average A-SIDS</td>
<td>0.408</td>
</tr>
<tr>
<td>Average 28 SIDS</td>
<td>0.476</td>
</tr>
<tr>
<td>OECD countries</td>
<td>0.619</td>
</tr>
<tr>
<td>High-income-countries' average</td>
<td>0.614</td>
</tr>
<tr>
<td>Upper-middle-income countries' average</td>
<td>0.539</td>
</tr>
<tr>
<td>Lower-middle-income countries' average</td>
<td>0.506</td>
</tr>
<tr>
<td>Low-income countries' average</td>
<td>0.446</td>
</tr>
</tbody>
</table>

It can be seen that economic governance score of the P-SIDS is slightly lower than the average for all high-income countries, but higher than all the other income groups possibly due to the relatively low debt ratios in P-SIDS.

4. The Indicator Scores: Economic Governance
When all SIDS are considered individually, Vanuatu and Kiribati received the best economic governance score among P-SIDS while Solomon Islands received relatively low scores.

P-SIDS = Pacific small island states
C-SIDS = Caribbean small island states;
A-SIDS = Africa and Indian Ocean small island states.
Social governance and GDP per capita

Social governance is measured by the non-income components of the Human Development Index (HDI), namely health (measured by life expectancy), education (measured by the average of years of schooling and expected years of schooling). These two components are thought to be policy-induced and closely related to social governance. The data is sourced from UNDP (2014).

The non-income HDI (NYH) was measured by rescaling the data using the Max-Min formula, and assigning a weight of 50% to the health component and 25% to each of the educational components (the same procedure used by the HDI compilers).

![Social Governance Index vs Log of GDP Per Capita](image)

**Higher**
- Fiji
- Tonga
- Samoa
- Kiribati
- Vanuatu
- Micronesia

**About the same**
- Marshall Is.
- Solomon Is.

4. The Indicator Scores: Social Governance
It can be seen that the social governance score of the P-SIDS is about the average the average for all SIDS, BUT lower than the Caribbean SIDS.

<table>
<thead>
<tr>
<th>Countries</th>
<th>SG Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average P-SIDS</td>
<td>0.608</td>
</tr>
<tr>
<td>Average C-SIDS</td>
<td>0.678</td>
</tr>
<tr>
<td>Average A-SIDS</td>
<td>0.501</td>
</tr>
<tr>
<td>Average 28 SIDS</td>
<td>0.614</td>
</tr>
<tr>
<td>OECD countries</td>
<td>0.882</td>
</tr>
<tr>
<td>High-income-countries' average</td>
<td>0.815</td>
</tr>
<tr>
<td>Upper-middle-income countries' average</td>
<td>0.654</td>
</tr>
<tr>
<td>Lower-middle-income countries' average</td>
<td>0.486</td>
</tr>
<tr>
<td>Low-income countries' average</td>
<td>0.258</td>
</tr>
</tbody>
</table>
When all SIDS are considered individually, Tonga and Samoa received the best social governance score among PSIDS while Solomon Is. received relatively low scores.

**P-SIDS** = Pacific small island states

**C-SIDS** = Caribbean small island states;

**A-SIDS** = Africa and Indian Ocean small island states.
The average score of the three indices

The indicators relating to political, economic and social governance were averaged and rescaled to render them suitable for taking their average. The results are shown in the next three slides.
Overall score of P-SIDS & income comparator countries

4. The Indicator Scores: Average Governance Score
### Overall governance scores (average of 3 indicators)

<table>
<thead>
<tr>
<th>Countries</th>
<th>AG Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average P-SIDS</td>
<td>0.574</td>
</tr>
<tr>
<td>Average C-SIDS</td>
<td>0.569</td>
</tr>
<tr>
<td>Average A-SIDS</td>
<td>0.439</td>
</tr>
<tr>
<td>Average 28 SIDS</td>
<td>0.538</td>
</tr>
<tr>
<td>OECD countries</td>
<td>0.865</td>
</tr>
<tr>
<td>High-income-countries' average</td>
<td>0.788</td>
</tr>
<tr>
<td>Upper-middle-income countries' average</td>
<td>0.568</td>
</tr>
<tr>
<td>Lower-middle-income countries' average</td>
<td>0.449</td>
</tr>
<tr>
<td>Low-income countries' average</td>
<td>0.290</td>
</tr>
</tbody>
</table>

It can be seen that the average governance score of the P-SIDS is higher than the average for all SIDS, but lower than the Caribbean SIDS.
When all SIDS are considered individually, Samoa received the best overall governance score among P-SIDS while Solomon Islands received relatively low scores.

P-SIDS = Pacific small island states  
C-SIDS = Caribbean small island states;  
A-SIDS = Africa and Indian Ocean small island states.
5. Governance Scores and Economic Growth
Negative correlation of governance with growth

It will be shown that all three governance indicators used in this study are negatively correlated with economic growth globally.

This tendency is also generally applicable to all SIDS and to the P-SIDS, although there are many exceptions.
It can be seen that the Solomon Is. And Marshal Is. which received very low governance score among P-SIDS are the fastest growing P-SIDS.

**P-SIDS** = Pacific small island states  
**C-SIDS** = Caribbean small island states;  
**A-SIDS** = Africa and Indian Ocean small island states.
It can be seen that the political governance index is negatively correlated with real GDP growth (2010-2014).
It can be seen that the economic governance index is negatively correlated with real GDP growth (2010-2014).
It can be seen that the social governance index is negatively correlated to real GDP growth (2010-2014).

Social Governance and Real GDP Growth (2010-14)
It can be seen that the average of the three governance indicators is negatively correlated with real GDP growth (2010-2014).
Average growth rates of groups of countries

<table>
<thead>
<tr>
<th>Countries</th>
<th>Growth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average P-SIDS</td>
<td>2.2</td>
</tr>
<tr>
<td>Average C-SIDS</td>
<td>1.3</td>
</tr>
<tr>
<td>Average A-SIDS</td>
<td>3.5</td>
</tr>
<tr>
<td>Average 28 SIDS</td>
<td>2.1</td>
</tr>
<tr>
<td>OECD countries</td>
<td>1.6</td>
</tr>
<tr>
<td>High-income-countries' average</td>
<td>2.7</td>
</tr>
<tr>
<td>Upper-middle-income countries' average</td>
<td>3.8</td>
</tr>
<tr>
<td>Lower-middle-income countries' average</td>
<td>4.6</td>
</tr>
<tr>
<td>Low-income countries' average</td>
<td>5.1</td>
</tr>
</tbody>
</table>

It can be seen that the Pacific SIDS’ growth rate was similar for the average of all SIDS, but slower than the average for the Upper Middle Income countries. Interestingly the average of growth rates increase as the average of income per capita level decreases.

5. Governance Scores and Economic Growth
6. A deeper look at the governance-growth relation
Why are growth and governance negatively correlated?

In this section we try to answer the question as to why governance scores and economic growth seem to be negatively correlated with each other.

As has been shown above in this study, a simple correlation between economic growth and governance indicators suggest that indeed the slowest growing countries tend to have the highest governance scores. However this does not mean that good governance is bad for growth. We argue in this paper that the equation should compare like with like, that is changes in real GDP should be compared with changes in governance, and not with its levels.
The hypothesis can then be stated as follows: *improvement in governance leads to improvement in real GDP* (i.e. to economic growth).

The reason for this is that it is likely to be easier for a low-income country to improve its GDP per capita and its governance level from a relatively low starting point.

In other words, a given governance improvement effort would have a higher effect in a low income and poorly governed country than in a high-income well-governed one. This possibility may be termed as “*diminishing marginal governance effect*”.

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6. A deeper look at the governance-growth relation
A related argument is that it is likely that governance is easier to improve in a country with a low level of governance and therefore has considerable room for improvement, compared to a country with a high level of good governance, which has reached or almost reached a good governance peak – a reality which may be termed as “diminishing marginal governance improvement” (DMGI).
Thus there may be a well-governed economy like Germany registering very low rates of economic growth, ceteris paribus, and a not-so-well governed economy, like the Philippines, registering high rates of economic growth.

The good performance of the Philippines could be attributed to the higher rates of governance improvements in this country ceteris paribus, even though the level of governance in the Philippines remains much lower than that of Germany.
To test the assumption that economic growth is related to changes in governance, we specify a simple growth equation as follows:

$$\Delta \text{GDP}_i = f (\Delta \text{GVN}_i, \text{GPC}_i, \log \text{P}_i)$$

Where:
\(\Delta \text{GDP}_i\) = GDP growth in real terms during a given period in country \(i\).
\(\Delta \text{GVN}_i\) = changes in governance during the same period in country \(i\).
\(\text{GPC}_i\) is GDP per capita in country \(i\).
\(\log \text{P}_i\) = Log of the population size in country \(i\).
In this exercise, $\Delta$GDP is measured by percentage changes in GDP in real terms averaged over the years 2010 to 2014 (that is the period following the global financial crisis).

GDP per capita (GPC) is included in the equation as a proxy for the stage of development of a country, in order to allow for the possibility that low income countries would tend to grow at a faster rate than higher income countries in line with the so-called convergence theory and to the possibility that backward countries tend to catch-up technologically, by amongst other things adopting technological advances previously created by more advanced countries. The sign of the coefficient on GPC is expected to be negative.
Changes in governance are measured in terms of the Rule of Law dimension of the Worldwide Governance Indictors (WGI) between 2010 and 2014. This index was chosen because of its implications for political governance, because it has a wide coverage of countries and also because it was produced by and large consistently during each year of the period under consideration.

The variable $\Delta GVN$ is expected to have a coefficient with a positive sign, capturing the effects of governance improvements on growth.
The population variable was introduced in the equation to allow for the various constraints faced by small states, including their high exposure to external shocks and their limited ability to reap the benefits of economies of scale (Briguglio, 2014). The sign of the coefficient on this variable is expected to be positive. It is measured in logs to allow for the possibility that a country twice the size of another is less than twice advantaged in terms of growth.

The GDP and population data was sourced from the IMF World Economic Outlook Database (IMF, 2014) and the Governance data was sourced from World Bank (2014).
The equation was applied for 183 countries, and the regression results indicate that the coefficients were statistically significant, as shown by the t-statistics (in Italic below the estimated coefficients):

$$\Delta GDP_i = 1.07 - 0.04 \ GPC_i + 13.31 \ \Delta GVN_i + 0.85 \ LogP_i$$

$$-3.5 \quad 2.8 \quad 3.6$$

$$R^2 = 0.17; \quad N=183$$

Tests of multicollinearity and heteroscedasticity indicated that the regression did not suffer from this problems. The correlation coefficient is somewhat low.

6. A deeper look at the governance-growth relation
The correlation coefficient improved considerably when a dummy variable (D) was introduced to capture the effect of the austerity programme which 5 euro-area countries were obliged to follow during the growth period under consideration. These are Cyprus, Ireland, Greece, Portugal and Spain. These results are shown below:

\[ \Delta \text{GDP}_i = 1.06 - 0.03 \text{GPC}_i + 11.48 \Delta \text{GVN}_i + 0.87 \log \text{P}_i - 4.91 \text{D}_i \]

\[ R^2 = 0.28; \quad N=183 \]
7. Implications
The indicators presented above, show first and foremost that good governance scores, be they political, economic or social, are correlated with GDP per capita. This would seem to suggest that good governance is associated with economic prosperity.

This conclusion, also often found in the literature, supports intuitive thinking, given that good governance is likely to mean responsive administration, better institutional set-ups and more efficient utilisation of resources.
The governance indicator considered in this study seem to be negatively correlated with economic growth.

This should not be interpreted as an indication that good governance is undesirable for growth, and that it should not, therefore, be pursued. On the contrary, the fact that good governance and economic prosperity are correlated, in that the best governed countries tend to enjoy the highest standard of living, can be seen as a sign that well-governed countries do reap benefits in the form of high income per capita, albeit this may have occurred over a long period of time.
The negative correlation between good governance and economic growth would seem to contradict a commonly held view that growth and good governance go hand-in-hand.

As has been shown in this presentation, the relationship between governance and real GDP growth is likely to be between changes (and not levels) in the governance variables.

The present study has hypothesised that that governance improvements are more difficult to achieve in a country with high governance standards when compared to a country which has considerable room for improvement in this regard.

7. Implications
The basic contention of this study is that improvement in governance is likely to improve the chances of economic growth, other things remaining constant.

For example if one compares economic growth between two countries, A and B, which are in the same level of development and with the same level of governance, one would expect that country A would register a higher growth rate than country B during a given period, if country A improves its governance more than country B.
Good governance and economic growth

A related argument is that if country A is less developed than country B, a given governance effort is likely to have a higher affect on growth in country A.

As already explained this has been termed “diminishing marginal governance effect”.

The interesting results produced in this study, namely that improvements (as against levels) in political governance have a positive statistically significant effect on economic growth, given the stage of development, can be considered as an added piece of evidence that it pays to improve governance.
Many middle-income and low-income countries registered relatively high growth rates during the recent decade, but they tend to have inferior governance structures when compared to richer countries.

Basing on the regression results of the present study one could argue that even though some P-SIDS have relatively low governance scores, the improvements in their governance over time may be one reason why these countries achieved relatively high growth rates.
The fact remains however, according to the indicators we selected, in some of the P-SIDS governance leaves much to be desired, and this could possibly be one reason why the benefits of growth in these countries are often not being enjoyed by large sections of the population.

This is another project that needs to be explored in that growth without good governance often works against inclusive growth.
References...1


